

## ABSTRACT OF THE DISCLOSURE

A manufacturing apparatus of a porous glass base material is provided. The manufacturing apparatus includes a burner repeatedly moving back and forth reciprocating in a direction along a longitudinal direction of an axis-rotating base member glass rod, where the burner ejects and deposits glass particles onto the base member glass rod, and an exhaust hood positioned above a porous glass soot formed by the deposition of the glass particles, where the exhaust hood repeatedly moves back and forth reciprocates in a same direction as the burner in synchronization with the burner. Here, the exhaust hood surrounds a portion of the porous glass soot corresponding to an angle  $\theta$  of  $100^\circ$  or more with respect to an axial center or a central axis of the porous glass soot. To be more specific, the angle  $\theta$  may be preferably  $180^\circ$  or more.